Exploring Factors Influencing Implementation of Nursing Process in Mathari National Teaching and Referral Hospital, Kenya

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ABSTRACT

Nursing Process is a decision-making approach that promotes critical thinking towards enhanced patient management and better health outcomes. Its implementation in most Kenyan hospitals still remain low especially in the mental health units. Inadequate knowledge, incompetence, high patient turnover, lack of resources, inadequate administrative support and negative attitude are some of the factors which undermine the NP implementation. The objective of the study was to explore factors that influence the implementation of nursing process in Mathari National Teaching and Referral Hospital in Kenya. MNTRH was purposely selected for the study and mixed method research design was used. The sample size was 151 nurses selected by simple random sampling technique while purposive sampling was used to select respondents for the interviews. Data was collected using questionnaires, interview guides and an observation checklist and presented in tables, graphs, charts and narrations. The data was analyzed using thematic analysis and descriptive statistics. Chi-square test of significance was used to determine the relationships between factors which influence NP implementation (Level of significance was set at p<0.05). The findings of the study revealed that majority of the respondents 104(93%) were affirmative on their awareness of NP. It was established that utilization of NP at MNTRH was yet to be successful with the respondents indicating 25-40% success levels. The main utilized phases of NP at MNTRH were; assessment, diagnosis, implementation/interventions, and documentation but significant gaps existed in all the phases. Both structural and process factors have positive and significant influence on NP implementation at MNTRH. The interviewees further indicated that major barriers affecting NP implementation to be high nurse-patient ratio, lack of managerial support and lack of monitoring and follow ups on the NP implementations. The study makes the conclusion that NP has not yet been fully utilized in patient care at MNTRH. Structural and process factors significantly influenced the level and extent of implementation of NP at MNTRH. The management of MNTRH are recommended to highly prioritize implementation of NP in patient care, offer regular in-service training on NP and monitor its practice. The Ministry of Health, regional health bureau, and other Non-Governmental partners are recommended to ensure that the institution is empowered on importance of NP and equipped with adequate nursing staffs.

Key Words: Assessment, Barriers, Explore, Factors, Implementation, Mental disorders, Nursing Process

1. INTRODUCTION

Nursing Process (NP) is defined as an organized framework of care that provides guidelines to sequence of reasoning in clinical settings (Stonehouse, 2017; Sendín & Ceña, 2018). The main

aim of the NP is to ensure delivery of holistic and quality nursing care in an organized manner (Mahmoud & Bayoumy, 2014; Varcarolis, 2016). Effective implementation of nurse process is critical in the achievement of high quality health care which translates to better patients' health outcomes (Ngao, 2015; Wagoro & Rakuom, 2015). However, despite this perceived importance in patient management, reports at the Ministry of Health indicate that in most hospitals, the NP framework is not completely utilized in nursing care provision (MoH, 2010).

Failure to use the NP leads to low Quality Health Care, disorganization of nursing care and conflicting roles (Mangare, Omondi, Ayieko, Wakasiaka, & Wagoro, 2016). Factors such as lack of resources, incompetence's, negative attitudes among nursing staffs and inadequate staffing have been associated in failure of full implementation of the NP (Manal, & Hala, 2014). The implementation of NP thus tend to be more challenging in mental health units where most nurses are faced with difficulties in identifying psychological problems and stating diagnostic labels. Sendín & Ceña, (2018) further argue that implementation of NP in the mental health facilities is lacking in some instances. The barriers mainly originate internally from the nurses themselves, the health care facilities and even the patients (Herr, Marie, Gordon, & Young, 2015; Sendín & Ceña, 2018). Given the benefits of the nursing process to both the nursing care and patient outcomes, it is important that the underlying factors to its implementation be fully understood (Wagoro &Rakuom, 2015). Measures to ensure proper implementation of KNP will act to ensure improvements in the quality of mental health care which will go a long way in achievement of vision 2030 that aims to promote provision of better health care to all Kenyan citizens. This is through the promotion of optimal health, the prevention of illness, and the care and treatment of persons with mental disorders through efficient nursing diagnosis (Prince, *et al* 2016).

2. STATEMENT OF THE PROBLEM

Nursing Process acts as a decision-making approach that promotes critical thinking geared towards enhanced patient management and better health outcomes (Melin-Johansson *et al*, 2017). However, most nurses have not been able to fully implement it in their daily practices (Blais, Hayes, Kozier, & Erb, 2015; Zamanzadeh, *et al*, 2015). The use of nursing process in most hospitals is still lagging despite all the efforts that have been made by the nursing professionals to implement its use (Mwenda, Kangethe, & Maranga, 2016). In this regard, factors such as inadequate knowledge, incompetence, high patient turnover, and lack of time undermine the NP implementation process (Sendín & Ceña, 2018; Herr, *et al*, 2015). Mahmoud and Bayoumy (2014) observed that most nurses complained of lack of time and high patient workload as significant barriers to NP implementation. Mangare, *et al*, (2016) further found out that though nurses may have a positive attitude towards the NP, they experience difficulties performing most of the phases of the NP. Ngao, (2015) noted that the application of the nursing process in patient care was minimal in most healthcare facilities in Kenya including Machakos Level 5 Hospital. Agyeman-Yeboah, *et al*, (2017) found out that clinical utilization of the Nursing Process at clinical settings was influenced by lack of clear understanding on the Nursing Process and Care Plans.

Ota, (2014) found out that the nurses in Level Five mental health units in Kenya faced many challenges related to work environment and patient-related factors. Similarly, Zamanzadeh, *et al*, (2015) established that most of the mental health institution lacked well-structured Nursing Processes implementation strategies. Patients with mental health disorders require individualized and more sensitive care due to their emotional and mental health concerns which further makes

the nursing process implementation more challenging (Moetsana-Poka, Lehana, Lebaka & McCarthy, 2014; Varcarolis 2016). Mental Health Disorders account for approximately 16 percent of the burden of disease in Kenya (MoH, 2010). Therefore understanding the factors influencing implementation of the nursing process in the care of patients with mental disorders will go a long way in improving patient outcomes in the mental health sector. Effective implementation of the NP is essential so as to ensure that all the patient's needs are met and improving the quality of patient care.

3. OBJECTIVE OF THE STUDY

The objective of the study was to explore factors that influence implementation of the nursing process in the care of patients with mental disorders in Mathari National Teaching and Referral Hospital.

The specific objectives of the study were to;

i.   To establish utilization of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital.

ii.   To determine the structural factors that influence the implementation of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital.

iii. To establish process factors that influence the implementation of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital.

4. LITERATURE REVIEW

The nursing process was introduced by North American Nurses Diagnosis Association (NANDA) and provides a means of not only standardizing nursing care but also the maintenance of the autonomy of the profession (Ngao, 2015). Nursing Process is a well-structured method for facilitating rational planning and individualized Quality Nursing Care (QNC) (Magare, *et al*, 2016; Ngao, 2015; Rakuom & Wagoro, 2016). Similarly, Yildirim and Ozkahraman, (2013) state that NP is a tool used in planning and offering patient care which is well organized and tailored to meeting individualized healthcare requirements. Efficiency in the entire NP practice is evaluated by the nature of approach to patients by nurses, specific interventions made, documentation quality, increased reflective thinking and better patient outcomes. Abdelkader and Othman, (2017) further add that the NP may be assessed by the level of participation in care planning of patients and ensuring that the provided nursing care is specific to requirements of a patient within the entire group context. This will ensure patients' satisfaction, reduced workload as well as improved communication amongst the nurses.

Nursing process in currently a globally accepted process which represents the experiences in nurses' patient care aimed at evaluation of the patient needs, proper planning, careful interventions and proper documentations (Ledesma-Delgado & Mendes, 2009). Afolayan, Donald, Baldwin, Onasoga, and Babafemi (2013) argued that international nursing process is made up of seven phases; assessment, diagnosis, identification of outcome, planning, intervention, implementation, and evaluation. Regionally, South Africa mental health hospitals use the 2007 international classification of nursing practice to determine the stages of the nursing process which include, assessment, diagnosis, planning implementation and evaluation (World Health Organization, 2013). The Kenya Nursing Process revised is revised to six steps and

included documentation as the last phase due to the observation by nurse administrators that there was a problem with documentation in Kenya (Ngao, 2015, Rakuom & Wagoro, 2016; Magare et al, 2016). Kenyan nurses realized it's structural and processes challenges in nursing practice necessitated the documentation phase of nursing processes therefore it had to be treated separately. The structural obstacles were limited number of nurses, task shifting, and changing policies on care delivery system in nursing and inadequate finance. Conversely, process factors were the development of an interpersonal relationship with patients and methods of procedure performance to ensure trust and disclosure at the assessment time.

5. THEORETICAL FRAMEWORK

This study was guided by the Nursing Process Theory and the Donabedian's theory. The Nursing Process Theory was formulated by Ida Jean Orlando's (Pelletier). The theory holds that effective interactions between patients and nurses will lead to effective interventions which will translate to better health outcomes (Parker & Smith, 2010). The theory focuses on improving the behavior of the patient based on their needs which are established through effective interactions with the nurse. Based on this theory, the need for nursing care is heightened more when one is not able to meet the needs that they have. Orlando's theory has been tested in various health care settings and the results support its' implementation to practice in various nursing fields (Schmieding, 2006).

Donabedian's Theory on the other hand was introduced by Avedis Donabedian (1966) who proposed a structure-process-outcome framework used in determining the quality of health care. Incorporation of all these three components provides the necessary information for the exploration of quality care. This three-part approach of quality assessment is possible because proper structure increases the probability of good processes and good processes in turn translate to good outcomes.

6. CONCEPTUAL FRAMEWORK

The conceptual framework of the study is adopted from the theoretical framework as shown by Figure 1.The independent variables of the study are the factors influencing the implementation of the nursing process while the dependent variable is the nursing process practice and outcomes in Mathari National Teaching and Referral Hospital. The moderating variables the factors hindering the implementation of NP. The independent variables are depicted to have a direct influence on the dependent variable.
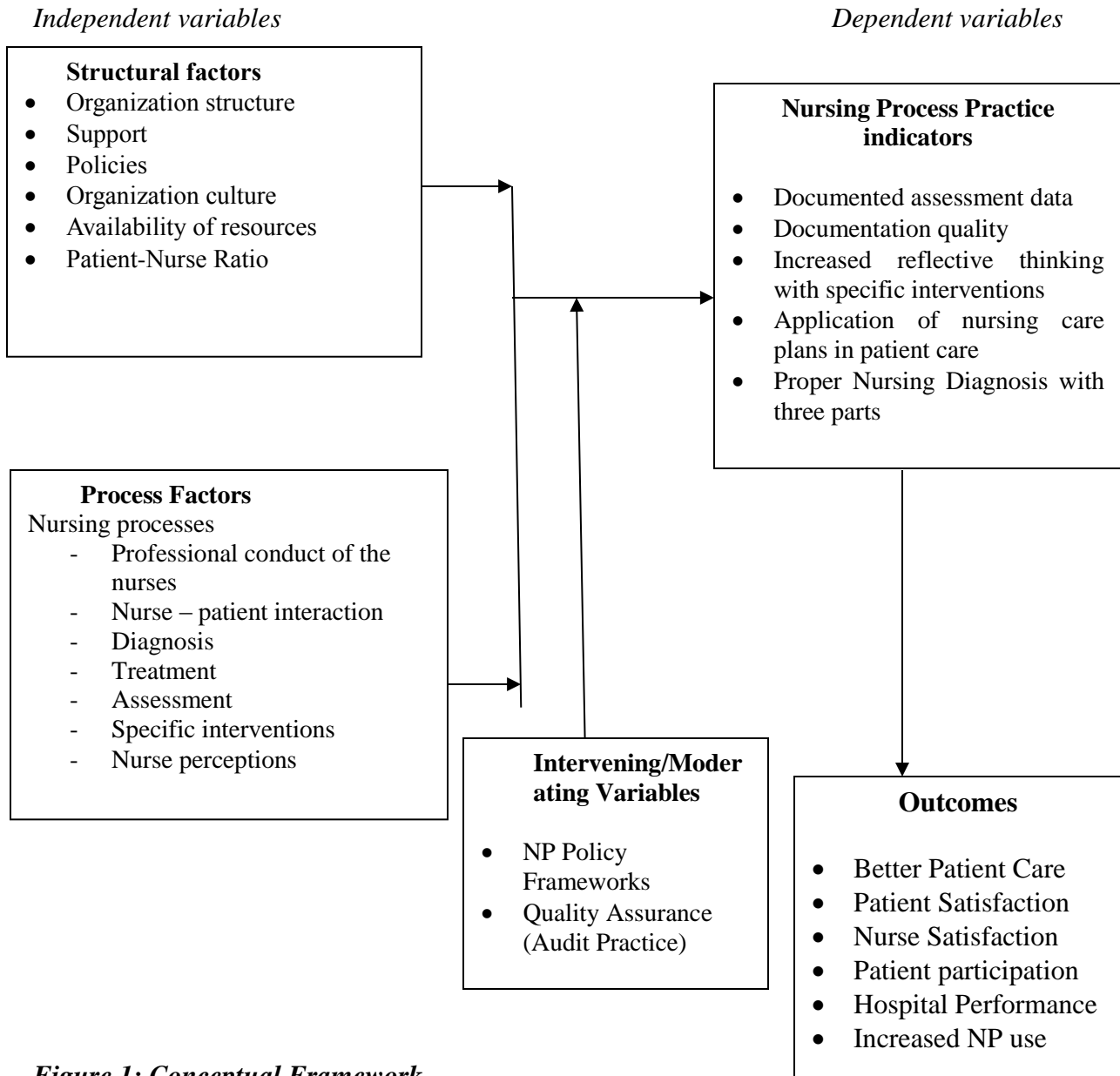
Independent variables   *Dependent variables*

Structural factors
- Organization structure
- Support
- Policies
- Organization culture
- Availability of resources
- Patient-Nurse Ratio

Nursing Process Practice indicators

- Documented assessment data
- Documentation quality
- Increased reflective thinking with specific interventions
- Application of nursing care plans in patient care
- Proper Nursing Diagnosis with three parts

Process Factors
Nursing processes
- Professional conduct of the nurses
- Nurse – patient interaction
- Diagnosis
- Treatment
- Assessment
- Specific interventions
- Nurse perceptions

Intervening/Moderating Variables

- NP Policy Frameworks
- Quality Assurance (Audit Practice)

Outcomes

- Better Patient Care
- Patient Satisfaction
- Nurse Satisfaction
- Patient participation
- Hospital Performance
- Increased NP use

Figure 1: Conceptual Framework

7. RESEARCH METHODOLOGY

This study adopted the mixed method research design. As explained by Setia, (2016) this research design incorporates both the qualitative and quantitative approaches. The qualitative approach was undertaken using the phenomenological research approach. This aided in the determination of the experiences with NP from the nurses' perspective. Descriptive cross-sectional research design on the other hand was used in the quantitative approach. The cross-sectional research design enabled the researcher to measure the outcome of NP implementation and the exposures in the study participants at the same time. The study was conducted at Mathari National Teaching and Referral Hospital and its primary function is to offer services to individuals with mental disorders. The hospital is situated on Thika super highway opposite Muthaiga police station, about six Kilometers north of Nairobi City Centre. The facility has a bed capacity of 700 yet the patient population is at 4,188, indicating that six mentally ill persons

shared a single bed. Due to the high population, one nurse takes care of approximately 147 patients, a ratio way above global standards of one nurse to six patients which necessitated the study.

The study population comprised of nurses involved in the management of in-patients with mental disorders. All the nurses who are in direct care of patients with mental disorders were legible for the study. The key informants for the interview were nurse managers and departmental heads at the facility. All nurses working as clinical nurse practitioners, managers or nurse educators in the mental health units/institutions, or nursing services unit/ward managers at the time of study. The sample size for the study was determined using the Fisher *et al* (1999) formula. This Sample Size Determination technique is termed to be the most appropriate for the study as it yields a representative sample for proportions (Chow, *et al*, 2017).

$$n = \frac{Z^2 pq}{d^2}$$

Whereby n is the sample size desired, z entails the normal standard deviate based at the 95% confidence interval (1.6), whereas p entails the prevalence of those with knowledge of NP who have the desired characters in the study and d is the standard error at 95% confidence interval while p was assumed to be 50% since the prevalence is not known.

q is (1-p) which is 1-0.5=0.5

Therefore n= {(3.24) ² 0.05 0.5}/ 0.05²

n= 384

Due to the population being not more than 10,000 the alternative formula was employed;

$$nf = \frac{n}{1 + n/N}$$

Whereby *nf* is the sample size being desired (population not more than10, 000); n is sample size desired (population exceeding 10,000) and N is the population estimate which is 250 nurses

Hence;

$$nf = \frac{384}{1 + 384/250}$$

This translates to 151 respondents who were selected using stratified random sampling.

For the qualitative study, the sample size for the key informants was defined using data saturation where by approximately 12 to 30 respondents are involved (Polit and Beck, 2012). This involved concurrent sampling, data collection and data analysis until no new themes on Nursing Process emerged. The saturation thus is used as a criterion through which data collection/analysis is discontinued whereby failure to attain saturation impacts on the research conducted. Use of the concept of data saturation is supported by proponents of qualitative research such as Merriam, (2015) and Cope, (2014).

For the quantitative study, simple random sampling technique was used. The random sampling every subject meeting the inclusion criteria is randomly selected until the desired sample of 151 respondents achieved (Mathieson, 2014). Random sampling is preferred as it minimizes biasness in the responses as it ensures equal representation of the entire study population. Simple random

technique was undertaken without replacement as each nurse who met the inclusion criteria had the same probability of being selected. For qualitative study, purposively sampling was used whereby the nursing service unit managers were selected. As such, total of 12 respondents were purposively selected to participate in qualitative study.

The data collection instruments comprised of questionnaires, interview guides and observation checklists. The questionnaire was structured into sections; each section addressing a specific research objective as per appendix. The questionnaire was developed after the researcher reviewed the relevant literature pertaining to the study. The interviews aided in the collection of qualitative data. The interview was structured using leading questions directed towards each of the specific objectives of the study. Interview responses were audio recorded. The researcher used a checklist with indicators of nursing process to extract data from the patients files. The checklist had items on work environment, comprehensive assessment, completion of patient charts and utilization of the nursing care plan.

The data collection instruments were pretested on 5% of the participants one week prior to the actual data collection in MNTRH. These respondents selected for the study however were not part of the actual study. During data collection, the data was checked for completeness and missing information at each point. Data was also checked during entry and compilation before commencement of analysis. Data sources for the study included questionnaires, interview transcripts and checklist notes. All the collected data were stored in a research file in the computer for data storage purposes and access only restricted to the principal researcher. To protect the respondents' confidentiality, all the identifying information were removed and replaced with a text identification label which was used to represent individual participant. After the study is completed, the collected data will be securely stored for a period of 5 years before being permanently destroyed.

The data collection instruments yielded both quantitative and qualitative data. Quantitative data were analysed using descriptive statistics which included measures of central tendency such as frequencies, percentages, means and standard deviations. After the completion of the data collection process, the collected questionnaires were first examined for completeness. The questionnaires were then coded. Categorical data were then subject to inferential statistics using Pearson's' Chi Square test to determine possible relationships between the factors influencing NP implementation and the predicted estimates and P values of 0.05 or less were considered significant. The data were then presented in tables, graphs, and charts. Quantitative data from the observation checklist on the other had were analysed through noting of similar trends and presented in summary form. Qualitative data were from the recorded information from interview sessions. The recorded audio tapes were listened to several times, transcribed and then interpreted independently. This was followed by thematic analysis. The qualitative data were presented in narrations. Discussion were then done which integrated both the qualitative and quantitative data which enabled valid conclusions to be made thereafter.

8. DATA ANALYSIS RESULTS

The study sought to determine the level of utilization of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital. The observation checklist was utilized in determining utilization of NP in management of patients having mental disorders at MNTRH. Specifically, three aspects were used in determination of NP utilization namely; patient assessment, availability of a nursing care plan and proper

documentation. Presence of 50% and above of the items in the checklist was indicative of NP utilization. The main indicators of assessment investigated by the study included identification and demographic data, history taking, presenting complaints and duration, history of present illness, past psychiatric history, family history, personal history and premorbid personality. Out of the 30 patient files examined, only 18 had at least 50% of the assessment measures investigated. This translate to a 60% assessment level which implies an above average extent of utilization as shown by Table 1.

Availability of a nurse care plan (NCP) was used in accessing the utilization of the other phases of NP. A nurse care plan describes the nursing diagnoses listed in order of priority, goals and outcome criteria, plan of action /intervention, implemented action and evaluation. Out of the 30 patient files examined only 12 of them had well set out nurse care plans translating to 40% which is a very low extent of utilization of nurse care plans as shown by Table 2. The interviewees further pointed out NP implementation at MNTRH was not fully successful with the only approximately 25-40% success levels.

Documentation on the other hand was measured using appropriate completion of patient charts, flow sheets, nurse's cardex and NCP for inclusion of all relevant information stated as implemented in the NCP. Out of the 30 patient files investigated only 16 of them were found out to have proper and complete documentation. This translates to a frequency percentage of 53% implying a moderate extent of documentation of the NP as shown by Table 2. Most the constructs were observed to be missing and only present in few files showing that completion of NP documentation by the nurses at MNTRH was still relatively low.

Table 1: Utilization of nursing process in management of patients

Nursing Process Phase Utilization	Number of files Examined	Frequency	Percentage
Availability of Patient Assessment	30	18	60%
Availability of a nurse care plan (NCP)	30	12	40%
Proper Documentation	30	16	53%

The study aimed in establishing the structural factors influencing the implementation of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital. The study found two main structural factors influencing nursing process implementation namely patient-related factors and hospital-related factors. The results of the Chi square test of significance as shown by Table 3 indicated that hospital-related factors had a p-value of $0.000 < 0.05$ while had a p-value of $0.000 < 0.05$ which implies they had a positive and significant influence on implementation of Nursing Process at MNTRH as the p-value was less than 0.05. Therefore a unit change in these structural factors will translate in a unit change in the level of NP implementation at MNTRH.

The study also sought to determine the process factors influencing the implementation of nursing process in management of patients with mental disorders in Mathari National Teaching and Referral Hospital. Specifically, the study investigated nurse related factors which included the respondents' understanding of NP, training on NP and general attitude of the staff on NP. The

results of the Chi square test of significance as shown by Table 2 indicate that nurse-related factors had a p-value of 0.035<0.05 which implies it had a positive and significant influence on implementation of Nursing Process at MNTRH as the p-value was less than 0.05.

Table 2 Test Statistics for Study Variables

	NP Implementation	Nurse Related Det.	Patient Related Det.	Hospital-Related Det.
Chi-Square	7.288[a]	45.469[b]	61.937[c]	57.469[d]
df	54	30	25	22
Asymp. Sig.	**1.000**	**.035**	**.000**	**.000**

a. 55 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 1.2.

b. 31 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 2.1.

c. 26 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 2.5.

d. 23 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 2.8.

The study found out a 60% assessment level which implies an above average extent of utilization of NP which tends to contradict Barasa, et al, (2017) who conducted a study on nursing process in county hospitals in Kenya and established that patient assessment was very low at less than 40%. Out of the 30 patient files examined only 12 of them had well set out nurse care plans translating to 40% which is a very low extent of utilization of nurse care plans. The stages in the Nursing Care plan not fully utilized included planning and evaluation. This compares with Ndambuki, (2015) who studied NP implementation in Msambweni district hospital, Kwale County and found out that presence of NP was still very low. The interviewees further pointed out NP implementation at MNTRH was not fully successful with the only approximately 25-40% success levels. This compares with Aseratie, Murugan, and Molla, (2014) who assessed the Factors Affecting Implementation of Nursing Process among Nurses in Selected Governmental Hospitals, Addis Ababa, Ethiopia. Agunwah and found that utilization of NP in patients using NCP was still low in most of the government hospitals. This confirms that most public hospitals were still faced with a challenge in NCP use. Most the constructs were further observed to be missing and only present in few files showing that completion of NP documentation by the nurses at MNTRH was still relatively low. Similarly, Mahmoud and Bayoumy (2014) established that the proper documentation was a challenge still facing most nurses in implementing NPs in the hospitals.

The study found two main structural factors influencing nursing process implementation namely patient-related factors and hospital-related factors. The study found out that high patient-nurse ratio, patient compliance and variation of outcomes among patients were huge determinant of the utilization and implementation of NP at MNTRH. Similarly, Mahmoud and Bayoumy (2014) in their study observed most nurses complained high patient workload was the most significant barrier to NP implementation. These patient related factors were established to have a large extent of influence on the implementation of nursing process at Mathari National Teaching and

Referral. The positive influence is supported by Fisseha, et al, (2014) who indicated that the patient's compliance and corporation are the key factors to implementation of NP and its success. In a similar way, Yeboah, (2017) in his study established that some patients, may not be completely willing to provide the necessary information pertaining to their medical condition causing difficulties in the diagnosis.

The study found out that there was minimal support provided by the hospital administration towards the implementation of NP at MNTRH. This concurs with Munroe, Duffy and Fisher (2010) also identified lack of administrative support as one factor affecting the NP implementation. The study also found out that there was inadequate monitoring and resource allocation geared towards NP implementation which was considered as a huge barrier to the success of the implementation. Prince, Comas-Herrera, and Karagiannidou (2016), also found out that the shortage of resources, inadequate support from the hospital management and high workload among nurses are among the critical obstacles to NP implementation in the management of patients with mental disorders.

Overall, Hospital-related factors of NP implementation had a large extent (mean>3.75) of influence on NP implementation at MNTRH. In a similar way, studies conducted have also established a positive effect of hospital related factors on nursing process implementation. Provi Brown, Wickline, Eccof and Glaser (2009) in their study discovered that organizational barriers such as lack of nursing autonomy were top barriers to the use of evidenced base practice while knowledge factor is a facilitator. This is similar to Schaefer (2010) who studied nursing process and its determinant factors and established that the number of workforce dedicated to wards nursing and management of the patients also acts to greatly affect its level of implementation and sustainability (Marnseri, 2012).

Findings of the study revealed that the main process factor influencing NP implementation was the nurse related factors. The study found out that most of the respondents at MNTRH were yet to fully understand the relevance and application of NP in patient management and care. The experience of the nurses was noted to be a main determinant on the nurses' knowledge, ease of use and applicability of the nursing care in patient management. It influenced the frequency of use of NP and the patient outcomes obtained. According to Alburquerque-Sendín and Palacios-Ceña (2018), the lack of experience tends to hinder greatly the implementation of the NP especially on management of patients with mental disorders. This coincides with Agunwah, (2010) who also found out that lack of experience of practical use of the nursing process tends to negatively affect its utilization. This tends to limit its feasibility in the daily nursing practice (Baraki, et al, 2017).

The respondents all agreed that the number of nurses recruited and deployed into the wards for patient management and care was a huge contributing factor for the success NP implementation. This compares with Agunwah (2006) who concluded that the shortage of nurses influenced the utilization of the nursing process. In a similar way, Fernandez-Sola et al. (2012) also reported that the high work overload was recognized as one of the main obstacles encountered by the nurses, while implementing the nursing process. The findings from this current study are in line with those of Bjorvell, Wredling and Thorell-Eksstrand (2008), who reported lack of time as a major issue in relation to documenting and updating the nursing-care plan.

Overall, nurse-related factors were established to have a positive and significant influence on implementation of Nursing Process at MNTRH as the p-value was less than 0.05.The positive

effect of nurse related factors on implementation of nursing process concurs with Agyeman-Yeboah, et al, (2017) who found out that clinical utilization of the Nursing Process at clinical settings was influenced by lack of clear understanding on the Nursing Process and Care Plans. Also Huguchi, Dulburgen and Duff (2012) in their study on the factors associated with the utilisation of nursing diagnoses found that the lack of knowledge on the nursing diagnosis prevented nurses from effectively using these nursing diagnoses.

9. CONCLUSIONS AND RECOMMENDATIONS

The study conclude that Mathari National Teaching and Referral Hospital is yet to fully attain complete implementation of NP in management of patients with evidence of nursing process implementation gaps in the facility. The study also concludes that structural factors have a positive and significant effect on nursing process implementation in Mathari National Teaching and Referral Hospital. These factors are concluded to either enhance or hinder the NP implementation based on their effectiveness. The study further concludes that nurse-related factors influence the level and extent of implementation of NP at MNTRH. Hence, the perceived benefits of the NP by the nurse as well as their skills and attributes are concluded to affect NP utilization and application. It is recommended that the management at MNTRH to highly prioritize implementation of nursing process as a key function of the hospital. The management should formulate better policies and frameworks which will ensure that the barriers to the NP are minimized. There should be periodic workshops and seminars on the nursing process, in order for nursing tutors to equip them with the needed skills and confidence to value and teach the nursing process. There should also be regular in-service training on to continually update knowledge and skills on the nursing process.

The nursing process committees and the nurse managers at MNTRH should conduct routine supportive supervision on NP. This is recommended to be conducted either after two weeks or monthly so as to provide direction and motivation of the nursing staff on the utilization of nursing process. This will make the task of assessing and managing the mental disorders of patients to be systematic and organized. Therefore, proper implementation of the NP will ensure that the patient needs are all catered for with a good patient outcome. The government of Kenya, in collaboration with the Ministry of Health to should ensure adequate budgetary allocation towards MNTRH and other hospitals. This will ensure that there is enough funds to facilitate the provision of the required resources for NP implementation. It is also recommends that the National Government to employ more nursing staff so as to reduce the high patient-nurse ratio that was established to be present in the hospital facility. The Ministry of Health, regional health bureau, zonal health desks and other Non-Governmental partners should ensure that the institutions are well empowered on importance of nursing process. The Ministry of Health should also strengthen national policy frameworks and interventions aimed at improving nursing process training and implementation at clinical setting in Kenya. This will act to greatly boost the overall effectiveness of the NP in the institution thus promoting better patient care.

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